

REMARKS

Claims 1-22 are pending. Claims 1-22 were rejected. Claims 1, 2, 7-9, 19 and 22 have been amended; no new matter has been added. Applicants respectfully request reconsideration of the rejections in view of the preceding amendments and following remarks.

Claim Objections

Claims 7 and 8 have been amended to overcome any informalities; withdrawal of the objection is respectfully requested.

In the Claims

Independent claims 1, 9, 19 and 22 have been amended to recite the aspect of the invention that was and is intended to be claimed by the pending claims. Independent claim 1 now recites “periodically determine if bandwidth is available on the channel after transcoding is performed on the compressed video data, and allocate additional packets from the multiple bitstreams to use the available bandwidth.” Independent claim 9 now recites “determining an available bandwidth on the channel after the one or more of the multiple bitstreams have been transcoded” and “allocating the available bandwidth to one or more of the multiple bitstreams.” Support for these amendments can be found throughout the Specification, and in particular, on page 6 line 6 to page 17 line 32, for example.

Rejections Under 35 U.S.C. 102/103

Claims 1-2, 5-6, 8-9, 19-20 and 22 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application No. 2001/0038668 to Gatepin (“Gatepin”).

Dependent claims 3, 10-18 and 21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Gatepin.

Gatepin invents a multiplexing system that applies a weight factor to incoming data to better distribute bandwidth between incoming bitstreams.

Independent claim 1 recites a multiplexer designed or configured to “periodically determine if bandwidth is available on the channel after transcoding is performed on the compressed video data, and allocate additional packets from the multiple bitstreams to use the

available bandwidth". Claim 9 recites "determining an available bandwidth on the channel after the one or more of the multiple bitstreams have been transcoded".

Thus, the claims recite allocating additional packets into bandwidth that is available after transcoding has occurred. Gatepin is completely silent on allocating bandwidth in this regard. He notes that his invention uses information from the input compressed data to compute the bit rate allocated to each transcoder (see paragraph 25, last 8 lines). He is silent on what happens to the available bandwidth after transcoding. In addition, Gatepin does not remotely suggest what happens if his weighted estimation uses less than the total bandwidth available. Quite oppositely, Gatepin boasts that his weighted algorithm assigns bandwidth correctly the first time, which maximally and efficiently uses available bandwidth (see paragraph 17). He thus teaches against assessing available bandwidth after transcoding, as the claims recite.

Therefore, Gatepin does not teach or suggest all limitations of the claims, such as allocating additional packets into bandwidth that is available after transcoding has occurred.

For at least these reasons, Applicants respectfully submit that Gatepin does not teach or suggest independent claims 1, 9, 19 and 22 and that the independent claims are allowable.

Dependent claims 2-8, 10-18 and 20-21 each depend either directly or indirectly from independent claims 1, 9, and 19, respectively, and are patentable over Gatepin for at least the reasons set forth above with respect to the independent claims. In addition, the dependent claims recite additional elements which when taken in the context of the claimed invention further patentably distinguish the art of record.

For example, dependent claim 13 recites "wherein the available bandwidth is allocated according to a minimum bandwidth requirement for a downstream decoder." Gatepin does not remotely suggest this limitation. Quite oppositely, he teaches against this limitation and notes that his weighted bandwidth arbitrator allocates the "optimum" output for each channel (see paragraph 32). Since Gatepin "optimally allocates", he thus has no need to periodically determine a decoder buffer level for each bitstream, as recited.

Based on the foregoing, all pending claims are allowable over the art of record.

Withdrawal of all rejections under 35 U.S.C. § 102(e) and 103(a) are therefore respectfully requested.

Lastly, the Office Action dated December 13 did not provide proper basis for rejecting numerous claims. For example, the Office Action did not include rejection of dependent claim 4. In addition, the Specification of Gatepin does not remotely suggest allocating additional packets into bandwidth that is available after transcoding has occurred, as was recited initially, and the Office Action only and ambiguously points to the MUX and controller FIG. 2 of Gatepin to reject all the limitations. Further, the Office Action also lacked individual rejection for claims 13-18; no meaningful portions of Gatepin have been illuminated to support rejection of these claims. Targeted application of Gatepin is respectfully requested for each claim and limitation - if the rejection using Gatepin is maintained.

Applicants believe that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,
BEYER WEAVER & THOMAS, LLP



William J. Plut
Limited Recognition No. L0079

P.O. Box 70250
Oakland, CA 94612-0250
Telephone: (650) 961-8300